

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001271**Date Inspected:** 17-Jan-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 730**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Xu Xian Ping**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to perform Visual Testing (VT) and Magnetic Particle Testing (MT) of the Orthotropic Box Girder (OBG), for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector Viars performed VT and MT verification of OBG side plate fillet welds SP052-01-001 thru SP052-01-014. Visual and Magnetic particle testing appeared to meet the requirements of AWS D1.5 (2002) and contract documents.

Caltrans QA Inspector Viars performed VT of OBG side plate SP030 fillet welds. During visual observations three transverse cracks were found on weld SP030-01-020, cracking was verified with Dry Magnetic Particle Testing. Cracking appeared to be propagating from the start and stop depressions of the manual Flux Cored Arc Welding (FCAW). ZPMC performed 10% MT prior to the Caltrans VT and MT verification. ZPMC Quality Control Mr. Shen Xue Jun stated the manual FCAW was performed due to an undersized weld condition of the original weld. ZPMC QC Certified Welding Inspector (CWI) Mr. Xu Xian Ping had previously accepted the visual inspection of the welds on the 22nd of December 2007. Areas of cracking were shown to American Bridge Flour (ABF) QC Mr. David LaRue. Mr. LaRue agreed with the Caltrans QA Inspector assessment. An Incident Report was issued for the QC oversight of the transverse cracking of SP030 fillet welds. ZPMC QC Shen Xue Jun stated additional magnetic particle testing would be required on the above mentioned fillet welds. Please see the attached photo below of the SP030 transverse cracking.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)



Summary of Conversations:

As identified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
